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# Stellar Interference

## *Measuring the Stars*

… the greatest need of stellar astronomy at the present day … is some means of measuring the apparent angular diameters of stars[1]

<div align="right">Sir Arthur Eddington (1920)</div>

*A*strometry is the precision side of *astronomy*. It answers the kinematic questions of astrophysics like: Where? How far? How big? How fast? For instance, the search by James Bradley (1693–1762) for stellar parallax in 1728 was a problem in astrometry. He found instead stellar aberration, which is the effect of the motion of the Earth through space on the apparent location of stars—also an astrometry problem. The first stellar parallax was measured by Friedrich Bessel (1784–1846), of Bessel function fame, for the binary star system known as 61 Cygni in 1838, with a parallax of about 300 mas.[2] The parsec, an astronomical distance scale, is the distance to an astronomic object that produces 1 arcsecond of parallax, placing 61 Cygni a bit over 3 parsecs away from Earth. One parsec is a distance of 3.26 light-years.

Once the astrometric problem of stellar parallax had been solved, at least for nearby stars, the next serious question in